

# **Christopher Martin James BAKER**

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## **Education:**

### **Imperial College London (2007 – 2011)**

#### **PhD/EngDoc: Computational Nuclear Transport for Shielding and Core Physics**

- Using Fortran to model the distribution of neutrons within a Nuclear Reactor
- Working on the discretisation of energy in the Neutron Transport Equation

### **University of Brighton (2006 – 2007)**

#### **PGCE (11 – 18) Mathematics**

- Written a Unit of Work on Shape, Space and Measure, with reasons on why it is studied.
- Attended lectures on CSMS, PSHE, Mathematics in other subjects.
- Passed First Placement at Filsham Valley School, Hastings
- About to start Second Placement at St Bedes School, Eastbourne.

### **Royal Holloway University Of London: (2003 – 2006)**

#### **BSc Mathematics 2:1**

- Studied Cryptography at advanced level learning how to analyse the advantages and disadvantages of various cryptosystems.
- Carried out independent research for my dissertation on Elliptic Curves
- Developed written and oral communication by giving presentations and writing my dissertation.
- Developed problem solving skills in modules such as Programming, Number theory and Cryptography.
- Learned how to use abstract mathematical ideas in real world applications.
- Learned the theory of computation and networks such as the world wide web.
- Studied mathematics to solve problems such as optimisation, game theory and probability.

### **Sussex Downs College (Lewes Campus): (2001-2003)**

- A-levels: Mathematics (B), Computing (B), Music (D), AS-level: Physics (E)

### **Bishop Bell Church Of England Secondary School: (1996-2001)**

- GCSEs: 10 including Mathematics (A), Science (AA), English (C), Statistics (B) and History (A) and a GNVQ language unit in German (Pass).

### **Professional Membership:**

- **The Institute for Mathematics and its Applications:** Associate Member.
- **The Royal Institution of Great Britain:** Member
- **Association of Teachers of Mathematics:** Member

### **Work Experience:**

#### **Filsham Valley School, Hastings** (September 2006 to January 2007)

- Developed classroom management skills, and ways to improve behaviour.
- Learned the organisation and planning of a variety of lessons in KS3 and KS4.
- Have taken a Year 8 class unsupervised for four units.

#### **St Richard's Church Langney.** (1998 – Present)

- Serving the holy sacrament
- Helping out during the church services
- Preparing and conducting intercessions and readings.

### **Additional Skills:**

#### **IT / Computing**

- Word Processing: Excellent use of Microsoft Word.
- Spreadsheets: Studied advanced use of spreadsheets during A-level computing and PGCE.
- Databases: Studied advance databases practice during A-level including multiple tables.
- Web Design: Proficient use of JavaScript and HTML programming.
- Programming: Knowledge of Visual Basic 6 and 2005, C++ and Prolog.
- Presentations: Good knowledge of presentation software such as Powerpoint
- Mathematical Software: Able to program mathematical methods in C++, excellent knowledge of Mathematica, proficient knowledge of Geometers Sketchpad and Cabri

#### **Music**

- Violin: Played in East Sussex Academy Of Music Orchestra
- Piano: Approximately Grade 7 standard
- Member of East Sussex Academy Of Music during 2001-3
- Excellent knowledge of musical theory
- Travelled on music tours to Netherlands and France.

#### **Sport**

- Member of my College's rugby club, established member of the 2<sup>nd</sup> XV
- Won our BUSA league unbeaten in the 2005/6.
- Been a member of my College's Thai boxing club.
- Enjoy running, skiing and attending the gym.

### **References:**

Prof Chris Pain (Supervisor)  
AMCG  
Imperial College, London  
Kensington  
London  
Email: c.pain@imperial.ac.uk

Fr David Ashton (Personal)  
St Richard's Church,  
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